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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/810,728	03/26/2004	Motoki Ito	81872.0060	9671

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EXAMINER

ADDISON, KAREN B

ART UNIT

PAPER NUMBER

2834

DATE MAILED: 05/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/810,728

Applicant(s)

ITO ET AL.

Examiner

Karen B. Addison

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 06 February 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 3/26/06 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1,6-8,10,15 and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Ogawa (469).

Ogawa teaches a surface acoustic device in figs.1-5 and 12-20 including piezoelectric substrate (4), an electrode (5) formed on one main surface of the piezoelectric substrate, to be at a ground potential (7), and an IDT electrodes (5a-5b, 6a-6b) formed on the one main surface of the piezoelectric substrate (4). Wherein the IDT electrode is an electrode comprising paired comb-teeth-shaped electrodes (5a-5b, 6a-6b), each having plural electrode fingers, oppositely placed in such a manner that the electrode fingers of one comb teeth shaped electrode are positioned between the electrode fingers of the other comb-teeth-shaped electrode. Either of the comb-teeth-electrode forming the IDT electrode (5 and 6) is connected to the electrode to be at the ground potential via a metal oxide resistor (19) see col 2- ln4-col 3 ln 60) formed on the piezoelectric substrate. Note that a metal oxide resistor is considered to be a semiconductor resistor.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2-5, 11-14, and 16-17 rejected under 35 U.S.C. 103(a) as being unpatentable over Ogawa in view of Sugai (101).

Ogawa, as described above, teaches all the claim structure but does not explicitly use some of the particular materials claimed. However, it has long been held that selection from among known suitable materials is within the skill expected of the routineer. Since all the claimed materials are known resistive materials (official notice taken) (not e.g. poly crystalline silicone resistor used by Sugai (col. 6 ln 47-52), selection of these known resistors to be used in lieu of the metal oxide semiconductor resistor material used by Ogawa would have been obvious to one of ordinary skill in the art.

5. Claim 9-19 rejected under 35 U.S.C. 103(a) as being unpatentable over Ogawa  
Ogawa, as describe above teaches the surface acoustic wave device per se but does not explicitly show its incorporation into the specific communications device describe in theses claims. However, the communication device including surface acoustic wave transducer therein is known per se (official notice taken-see also applicants specification pages 1-4). It would have been obvious to one of ordinary skill in the art to incorporate the improved surface acoustic wave device taught by Ogawa into any known system that use a surface acoustic wave device, since Ogawa' s surface acoustic wave device includes protection against pyro electric discharge caused by thermo shock.

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Further cited documents are Dufillie (note fig.1 and 2 #29), Hikita (see#99, #911 fig.9) Flowers (fig.1) and Mitsutsuka.

***Response to Arguments***

6. Applicant's arguments filed 1/4/2006 have been fully considered but they are not persuasive.

In response to the applicant's argument that, Ogawa does not teach the ground electrode formed on the main surface of the piezoelectric substrate is noted.

However, Ogawa teaches the ground electrodes known as a tap electrodes (6) which is electrical connected through the resistor to the ground potential which is located on the main surface of the substrate(fig.15b) thereby, making the tap electrode a grounding electrode..

In response to the applicant's argument that, Ogawa fails to disclose semiconductor resistor are noted. However, Col 13 line 37-42 discloses that the resistor may be a fixed resistor and the resistor alternatively be the same as semiconductor glass material, semiconductor resin material and a metal oxide material resistor.

In response to the applicant's argument that, Surgai does not teach the deficiencies of Ogawa is noted. However, Since Surgai reference from the same field of endeavor of Ogawa, the selection among known suitable materials is within the skill expected of the routineer. Since all the claimed materials are known resistive materials (official notice taken) (not e.g. poly crystalline silicone resistor used by Sugai (col. 6 ln 47-52), selection of these known resistors to be used in lieu of the metal oxide semiconductor

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resistor material used by Ogawa and would have been obvious to one of ordinary skill in the art.

In response to the applicant's argument that, the communication device Ogawa lacks deficiencies is noted. However, the communication device including surface acoustic wave transducer therein is known per se (official notice taken-see also applicants specification pages 1-4). It would have been obvious to one of ordinary skill in the art to incorporate the improved surface acoustic wave device taught by Ogawa into any known system that use a surface acoustic wave device, since Ogawa's surface acoustic wave device includes protection against pyro electric discharge caused by thermo shock.

Further cited documents are Masuda(US.5016260) for communication device with Transducer having power amplifier, filter, and switching circuit.

### ***Conclusion***

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karen B. Addison whose telephone number is 571-272-2017. The examiner can normally be reached on 8:00 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on 571-272-2044. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KBA  
4/15/06

  
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